

## REMARKS

Applicants thank the Examiner for a thorough search. In this response, no claims have been amended or cancelled and thus Claims 1-120 are pending in the application. Each issue raised in the Office Action mailed April 7, 2004 is addressed hereinafter.

I. 35 U.S.C. § 102(e): Rejection of Claims 1, 9, 11-15 and 17

The Office Action rejects claims 1, 9, 11-15 and 17 under 35 U.S.C. § 102(e) as being anticipated by Bowman-Amuah et al., U.S. No. 6,542,593 (hereinafter "*Bowman-Amuah*"). The rejection is respectfully traversed.

Claim 1 recites a method for automatically provisioning network services for customer premises equipment (CPE) in a next generation telecommunications network. In the claimed method, a service request that specifies a service to be provided to the CPE is received. A configuration template for a configuration appropriate for the CPE is retrieved. At least one resource associated with the CPE is allocated and reserved. Configuration data for the CPE based on the configuration template and stored system configuration information is generated. The generated configuration data is delivered to the CPE resulting in provisioning the CPE to provide the requested service.

In contrast, *Bowman-Amuah* only describes a method of routing telephone calls, data and multimedia information through a hybrid network. *Bowman-Amuah* has no disclosure of performing any automatic provisioning of network services for CPE, much less any disclosure of automatically provisioning network services using a configuration template.

The Office Action states that “Bowman-Amuah discloses a method ... of automating the provisioning of network services for customer premises equipment of a subscriber in a next generation digital telecommunications network,” citing *Bowman-Amuah* col. 12-13 lines 60-17, col. 14-15 lines 49-11 and col. 52 lines 39-54. This is incorrect. The cited portions of *Bowman-Amuah* merely describe the well-known concept of a Next Generation Network (NGN) (Col. 12-13, lines 60-17), IP based services available on NGNs (Col. 14-15, lines 49-11), and an “information provisioning step” of *Bowman-Amuah*’s Proactive Threshold Manager.

This “information provisioning step” is not related to the provisioning of network services for customer premises equipment as required by the claimed invention. *Bowman-Amuah*’s “information provisioning”, as shown by step 1628 in Fig. 16B (referenced in the cited section of *Bowman-Amuah*), merely refers to a step in a process in which information from step 1626 is provided to the Proactive Threshold Manager. The cited section of *Bowman-Amuah* (col. 52, lines 39-54) does not disclose any provisioning of a network service for CPE.

The use of the word “provisioning” in this context is not at all related to network provisioning, as it is known to those skilled in the art. The general definition of the word “provisioning” means “providing.” This is how the word “provisioning” is used in *Bowman-Amuah*, when information is provided to the Proactive Threshold Manager. However, in the context of telecommunications, as in the claimed invention, “provisioning network services” means providing telecommunications products or services, such as bandwidth or wiring, though setup and configuration. *Bowman-Amuah* does not disclose provisioning of a network service. The claims of the present invention

are directed to automating the task of provisioning a network service. A general discussion of network service provisioning is provided in the present specification at Pages 4-5 and 19. The claimed invention is directed to a method of automating the setup steps required to accurately provision a CPE device for NGN services. (Page 6, lines 8-11).

The Office Action states that *Bowman-Amuah* shows “the steps of receiving a service request from a network service provider that specifies a service to be provided to the customer premises equipment,” citing col. 9 lines 3-10 and col. 13-14 lines 58-2. This is incorrect. Col. 9, lines 3-10 of *Bowman-Amuah* merely teaches that service providers can use tools to manage carrier data networks. Col. 13-14, lines 58-2 teaches that Intelligent Network (IN) capabilities are provided by intelligent network devices such as SCP, STP, SSP, etc. *Bowman-Amuah* teaches that Service Creation Environment platforms can be used to create new IN services.

As described at page 21, line 17 of the present specification, “a service request generally specifies whether the subscriber is requesting voice service, data service, the type of data service if any, quality of service parameters, etc.” In general, the claimed invention relates to service requests for network access service. Pages 40-41 of the present specification also provide more detail about a service request.

*Bowman-Amuah* does not ever teach or suggest “receiving a service request from a network service provider that specifies a service to be provided to the customer premises equipment” as required by the claimed invention. The Examiner is requested to explain how the cited sections of *Bowman-Amuah* teach this limitation.

The Office Action next states that *Bowman-Amuah* teaches “retrieving a configuration template for a configuration appropriate for the customer premises equipment; allocating and reserving at least one resource associated with the customer premises equipment; generating configuration data for the customer premises equipment based on the configuration template and stored system configuration information; delivering the configuration data over the network to the customer premises equipment to result in the provisioning the customer premises equipment to provide the service,” citing *Bowman-Amuah* col. 13 lines 18-28, col. 12 lines 42-45, and col. 12-13 lines 60-17. This is incorrect.

Col. 13 lines 18-28 of *Bowman-Amuah* merely teach that services that were one available only on separate parallel networks will soon be available on an integrated packet based network such that users will be able to use services that cross many access technologies. Col. 12 lines 42-45 of *Bowman-Amuah* teach that “Service Management controls the overall service to the users of the system” such that users are isolated from how the system is managed. Col. 12-13 lines 60-17 describes the growth of IP networks resulting in NGN networks. The Examiner is respectfully requested to explain how any of the teachings of *Bowman-Amuah* are related to the claim limitations of claim 1 quoted above.

None of the foregoing teachings involve performing the claimed steps to result in automatically provisioning a network service for CPE. With respect to the step of retrieving a configuration template, the current specification at Page 29, lines 16-17 describes a Configuration Template Manager providing a template file associated with the subscribed service and variables. As further described at Pages 41 and 42, the

configuration template manager may provide a pre-defined template file for each service type, operation type and CPE type. IP addresses for voice and data are allocated and reserved. (Page 24, lines 3-5). Nowhere in the cited sections of *Bowman-Amuah* is a configuration template appropriate for a CPE ever retrieved.

With respect to the step of allocating and reserving at least one resource associated with the CPE, the present specification discloses at Page 24, lines 3-6 that IP addresses for voice and data are allocated and reserved as required for the requested network service. The Examiner is respectfully requested to point out the sections of *Bowman-Amuah* that teach allocating and reserving a resource associated with a CPE.

With respect to the step of generating configuration data for the customer premises equipment, the present specification discloses at Page 47, lines 11-26 that a configuration file is generated for a CPE device by instantiating the retrieved template with system configuration information. The Examiner is respectfully requested to point out the sections of *Bowman-Amuah* that teach generating configuration data for the customer premises equipment based on the configuration template and stored system configuration information.

With respect to the step of delivering the configuration data to the customer premises equipment to result in provisioning the customer premises equipment to provide the service, the present specification discloses at Page 24 that the generated configuration data is sent directly to the CPE. Alternatively, a configuration file may be prepared for delivery. As discussed at Page 28, lines 10-16, configurations may be delivered using FTP or by telnet, for example. The Examiner is respectfully requested to point out the sections of *Bowman-Amuah* that teach delivering configuration data over a network to the

customer premises equipment to result in provisioning the customer premises equipment to provide the service.

Finally, the Office Action does not address how *Bowman-Amuah* teaches or suggests the limitations of independent claim 15. The apparatus of Claim 15 requires:

- a provisioning engine configured to receive a service request from a network service provider that specifies a service to be provided to the customer premises equipment;
- a configuration template manager communicatively coupled to the provisioning engine and configured to retrieve a configuration template for a configuration appropriate for the customer premises equipment;
- means in the provisioning engine for allocating and reserving at least one resource associated with the customer premises equipment and for generating configuration data for the customer premises equipment based on the configuration template and stored system configuration information;
- a configuration delivery manager communicatively coupled to the provisioning engine and configured to deliver the configuration data over the network to the customer premises equipment to result in provisioning the customer premises equipment to provide the service.

Each of the components required in claim 15 is discussed in Pages 27-29 of the present specification and shown in Fig. 7. Applicants respectfully submit that *Bowman-Amuah* does not teach the apparatus as required by claim 15.

Furthermore, the Office Action provides no explanation of how dependent claims 9, 11 and 17 are taught or suggested by *Bowman-Amuah*. The Examiner is respectfully requested to point out the sections of *Bowman-Amuah* that teach the additional limitations required by claims 9, 11 and 17.

Applicants respectfully submit that *Bowman-Amuah* does not anticipate independent claims 1, 12, 13, 14 and 15, because *Bowman-Amuah* does not teach or disclose all of the limitations of these independent claims.

II. 35 U.S.C. § 102(e): Rejection of Claims 2, 4, 5, 18 and 20

The Office Action rejects claims 2, 4, 5, 18 and 20 under 35 U.S.C. § 102(e) as being anticipated by *Bowman-Amuah*. Because claims 2, 4, 5 depend directly on claim 1, and claims 18 and 20 depend directly on claim 15, these dependent claims include each and every feature of claims 1 and 15 identified above that distinguish *Bowman-Amuah*. Therefore these dependent claims are patentable over *Bowman-Amuah* for at least the same reasons set forth above.

Furthermore, with respect to the claims, the Office Action states that *Bowman-Amuah* discloses the additional limitations required by these claims at col. 3 line 45, col. 13 lines 39-40 and col. 45 lines 43-59. Col. 3 line 45 merely defines the abbreviation “ADSL” as meaning “Asymmetric Digital Subscriber Line.” Col. 13 lines 39-40 discloses that a core network may consist of ATM, among other networks. Col. 45 lines 43-59 define the term “ATM”, which is already well-known to those skilled in the art. Therefore the terms ATM and ADSL are defined in the cited sections of *Bowman-Amuah*. However, there are many available definitions of these terms. In order for an anticipation rejection to stand, the limitations of the claims must be taught or disclosed in the cited reference. *Bowman-Amuah* does not disclose the additional limitations of claims 2, 4, 5, 18 and 20, it merely defines terms used in those claims.

For example, claim 18 requires that the “customer premises equipment is an ADSL router, wherein the network is an asynchronous transfer mode (ATM) network, and wherein means for generating configuration data include means for allocating and reserving an IP address and fully-qualified domain name for each of a plurality of permanent virtual circuits associated with communications among the network and the

router.” The cited sections of *Bowman-Amuah* do not disclose or suggest means for allocating and reserving an IP address and fully-qualified domain name for each of a plurality of permanent virtual circuits associated with communications among the network and the router. *Bowman-Amuah* only discloses that the term “ATM” means asynchronous network.

III. 35 U.S.C. § 102(e): Rejection of Claim 3 and 19

The Office Action rejects claim 3 and 19 under 35 U.S.C. § 102(e) as being anticipated by *Bowman-Amuah*. Because claims 3 and 19 depend directly on claims 1 and 15, respectively, these dependent claims include each and every feature of claims 1 and 15 identified above to distinguish *Bowman-Amuah*. Therefore these dependent claims are patentable over *Bowman-Amuah* for at least the same reasons set forth above.

Furthermore, with respect to these claims, the Office Action states that *Bowman-Amuah* discloses the additional limitations required by these claims at col. 24 lines 21-42 and col. 26 lines 4-15. The cited sections of *Bowman-Amuah* do not disclose the additional limitations of claims 3 and 19. These claims require that the configuration service request comprises information uniquely identifying the customer premises equipment, information identifying one or more permanent virtual circuits assigned by the service provider to the customer premises equipment and access data. Nowhere in *Bowman-Amuah* is there any mention of either a service request, as discussed above, or of permanent virtual circuits, much less a service request that comprises information identifying one or more permanent virtual circuits assigned by the service provider to the



customer premises equipment, as required by claims 3 and 19. Withdrawal of the rejection of claims 3 and 19 is respectfully requested.

IV. 35 U.S.C. § 102(e): Rejection of Claim 6, 10 and 16

The Office Action rejects claim 6, 10 and 16 under 35 U.S.C. § 102(e) as being anticipated by *Bowman-Amuah*. Because claims 6 and 10 depend directly on claim 1, and claim 16 depends directly on claim 15, these dependent claims include each and every feature of claims 1 and 15 identified above to distinguish *Bowman-Amuah*. Therefore these dependent claims are patentable over *Bowman-Amuah* for at least the same reasons set forth above. Withdrawal of the rejection of claims 6, 10 and 16 is respectfully requested.

V. 35 U.S.C. § 102(e): Rejection of Claim 7 and 8

The Office Action rejects claim 7 and 8 under 35 U.S.C. § 102(e) as being anticipated by *Bowman-Amuah*. Because claims 7 and 8 depend directly on claim 1, these dependent claims include each and every feature of claim 1 identified above to distinguish *Bowman-Amuah*. Therefore these dependent claims are patentable over *Bowman-Amuah* for at least the same reasons set forth above.

Furthermore, with respect to these claims, the Office Action states that *Bowman-Amuah* discloses the additional limitations required by these claims at col. 46 lines 23-43. The cited section of *Bowman-Amuah* discloses an Internet-based Callback Architecture. Claims 7 and 8 require the additional step of creating and storing updated configuration data in response to receiving a request to update provisioning of the customer premises

equipment, among other steps. The Examiner is respectfully requested to point out how *Bowman-Amuah* teaches or discloses this step. Nowhere in *Bowman-Amuah* is there any mention of updating configuration data or even of receiving a request to update provisioning of customer premises equipment. Withdrawal of the rejection of claims 7 and 8 is respectfully requested.

IV. Conclusions

In view of the forgoing remarks, Applicants respectfully submit that the allowance of the pending claims 1-20 is appropriate and such action is earnestly solicited.


The Examiner is invited to telephone the undersigned at (408) 414-1080 to discuss any issue that may advance prosecution.

No fee is believed to be due specifically in connection with this Response. To the extent necessary, the Commissioner is authorized to charge any fee that may be due in connection with this reply to our Deposit Account No. 50-1302.

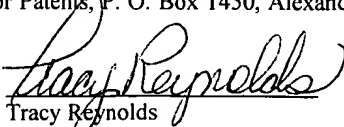
Respectfully submitted,

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July 7, 2004 (Date)	by  Tracy Reynolds